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| 09/825,353   | 04/04/2001  | Erik Dahlman         | 2380-307            | 1424             |
| 23117  | 7590        | 07/27/2005           | EXAMINER            |                  |
| NIXON & VANDERHYE, PC<br>901 NORTH GLEBE ROAD, 11TH FLOOR<br>ARLINGTON, VA 22203 |             |                      | NGUYEN, HANH N      |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2662                |                  |

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/825,353

Applicant(s)

DAHLMAN ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 2/24/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-14 and 16-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-13 and 16-37 is/are rejected.
- 7) ☒ Claim(s) 10 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3-9, 12, 13, 16-22, 24-28 and 30-36 are rejected under 35 USC 102(e) as being anticipated by H'mimy et al. (Pat. 6,512,752 B1).

In claims 1, 24, 28, 30, H'mimy et al. discloses a CDMA communication system (Fig. 1, network 10, col.4, lines 17-28) establishing a connection with a mobile radio (fig.8, assigning transmission channels with mobile 12 which requests for a channel, col.2, lines 1-7 & col.6, line 65 to col.7, line 5) in a cell (fig.6, coverage area 52) that includes a first type channel (common channels used by mobile handset 12, see col.4, lines 12-18) and a second type of channel (dedicate channel allocated to a mobile handset 12, see col.4, lines 12-18) having an associated first frequency reuse (Fig. 8, step 118, frequency reuse value of 4/12, col.7, lines 60-67) for the

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first channel, and an associated second frequency reuse ( fig.8, frequency reuse value of 1/3) for the second channel, wherein one of the channels is a code division multiple access (CDMA) channel ( col.4, lines 18-25). H'mimiy further discloses different channels are selected from a cell that has different reuse patterns (different frequency reuse values for different types of channels, col.8, lines 12-17).

In claims 12, 27 and 28, as disclosed in the rejection of claims 1, H'mimiy et al. discloses a computer memory storing program instructions that perform the requests ( a memory configured to store frequency reuse values); and a CPU ( controller) executes stored program instructions ( see col.6, lines 25-40).

In claim 3, H'mimiy et al. discloses the first type of channel is a shared channel (common channels used by mobile handset 12, see col.4, lines 12-18) and the second channel is a dedicated channel (dedicated channel see col.4, lines 12-18).

In claims 16, 25 and 31, H'mimiy discloses the first type of channel is a shared channel (common channels used by mobile handset 12, see col.4, lines 12-18) and the second type of channel is a dedicated channel (dedicated channel allocated to a mobile handset 12, see col.4, lines 12-18).

In claims 4 and 32, H'mimiy et al. discloses the shared channel is a downlink channel (see Fig.8, col.4, lines 15-20) and the second type of channel includes a downlink dedicated channel associated with the downlink shared channel ( col.4, lines 15-20 & col.6, lines 65 to col.7, line 20).

In claims 26 and 33, the limitations of these claims have been addressed in claim 24.

In claim 5, H'mimiy discloses the second channel type also includes an uplink dedicated channel, associated with the downlink shared channel (See col.4, lines 12-20).

In claims 6, 7, 17 and 22, H'mimiy discloses the first frequency reuse ( frequency value 4, fig.8) is greater than the second frequency reuse (Fig.8, frequency value 1).

In claims 8, 18, 20 and 34, the limitations of these claims have been addressed in claim 1.

In claim 9, 19, 21 and 35, as disclosed by the rejection of claim 1, H'mimiy further discloses the first type of channel includes multiple downlink channels (common channels used by mobile handsets 12, see col.4, lines 12-18) .

In claim 13, H'mimiy discloses a radio network controller (Fig.1, BSC 28) coupled to one or more base stations (Fig.1, BTSs 26). See col.3, lines 30-45).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 23 and 29 are rejected under 35 USC 103(a) as being unpatentable over H'mimiy (Pat. 6,512,752 B1) in view of Mujtaba (Pat. 6,813,254 B1).

In claims 11, 23, 29, H'mimiy does not disclose the other of the first and second channels is an orthogonal frequency division multiplexing (OFDM) channel. Mujtaba discloses, in Fig.11, downlink channels 102 use OFDM technique ( first channel is an OFDM channel). See col.6, lines 30-45. Therefore, it would have been obvious to one ordinary skill in the art to use OFDM

technique in uplink or down link channels in O'Byrne for the purpose of separating users with different slots and codes.

Claim 37 is rejected under 35 USC 103(a) as being unpatentable under H'mimy (Pat. 6,512,752 B1).

In claim 37, as disclosed by the rejection of claims 1 and 36, H'mimy et al. further discloses a base station controller 28( fig.1) initiating handovers between base stations 26 in large urban ares( handover circuitry performing handovers, col.3, lines 40-45). Therefore, it would have been obvious to one ordinary skilled in the art to perform handovers between time slots ( channels), cells and MSCs in H'mimy et al.

#### ***Allowable Subject Matter***

Claims 10 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

In claims 10 and 14, the prior art fails to disclose the first type of channel is a channel not configured to use soft handover, and the second type of channel is a channel that is configured to use soft handover.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-9, 11-13, 16-37 have been considered. but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soliman (Pat.6356531 B1) discloses Monitoring of CDMA Load and Frequency Reuse Based on Reverse Link Signal-To-Noise Ratio.

Natali et al. (Pat. 6,317,412 B1) discloses Increased Capacity in an OCDMA System for Frequency Isolation.

Peele (Pat. 6,898,431 B1) discloses Dynamic channel allocation in a sectorized cell of a cellular communication system.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen

HANH NGUYEN  
PRIMARY EXAMINER

  
July 19, 2005